

Receiving Report

Date: 14-12-3

Batch No: 131023

Supplier: Airdynamics

Dart P/O: 25137

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☒ No ☐
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☐
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC18 Inspection ☐ N/A ☒
 Work Order ☐ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

Production/Admin:

Date

Received/Counting

Initial

Location



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

OUTSTANDING PO REPRINT

Purchase Order ID PO25137

Purchase Order Date 7/24/2014

PO Print Date 11/7/2014

Page Number 1 of 1

Order From : VC-AD001
AIR DYNAMICS
19420B CLARK GRAHAM AVENUE
BAIE D'URFE, QUEBEC H9X 3R8

Ship To : DART AEROSPACE LTD
1270
ABERD
EEN
HAWKE
SBURY,
ON
K6A
1K7
CANAD
A

Contact Name
Vendor Phone 514-457-4287
Vendor Fax 514-457-4143
Ship To Contact
Ship To Phone
Ship Method Purolator ground collect
Ship Acct

Buyer Michael Gregoire
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB EXW - (Ex Works)

Line Nbr	Item ID Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Extended Price
4	71400-20	599-A8574-1A/B/C	11/21/2014 Yes 11/21/2014	1.00 Each	\$1,995.00
	Conductive Coating Copper Paint				
	NOTE: NO MIL SPEC'S REQUIRED				

SP14-12-3

Line Total: \$1,995.00

Outstanding PO Total: \$1,995.00

PO Instructions:

Purolator Acc#7684382

Change Nbr: 8

Change Date: 11/6/2014

Terms & Condition of
Purchasing(Suppliers) and
Procurement Quality Clauses are an
integral part of our AS9100



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO25137**

Purchase Order Date 7/24/2014

PO Print Date 12/3/2014

Page Number 1 of 1

Order From :
AIR DYNAMICS
19420B CLARK GRAHAM AVENUE
BAIE D'URFE, QUEBEC H9X 3R8

VC-AD001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Michael Gregoire
Vendor Phone	514-457-4287	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	Purolator ground collect	FOB	EXW - (Ex Works)
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
3	71400-20 Conductive Coating Copper Paint (3 gal.Kit) NOTE: NO MIL SPEC'S REQUIRED	599-A8574-1A/B/C	9/10/2014 Yes 10/31/2014		1.00 Each	\$1,995.00	\$1,995.00

REFERENCE ONLY

Line Total: \$1,995.00

4	71400-20 Conductive Coating Copper Paint NOTE: NO MIL SPEC'S REQUIRED	599-A8574-1A/B/C	11/21/2014 Yes 11/21/2014		1.00 Each	\$1,995.00	\$1,995.00
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Line Total: \$1,995.00

PO Total: \$3,990.00

REFERENCE ONLY

PO Instructions: Purolator Acc#7684382

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 9

Change Date: 12/3/2014

**Air Dynamics****BON DE
LIVRAISON**19420B Clark Graham Avenue
Baie D'Urfé, Québec H9X 3R8Tel.: (514) 457-4287
Fax: (514) 457-4143

PACKING SLIP 731305

CUSTOMER NO. 700

Facture à:
Invoice to:DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKS BURY ON K6A 1K7

ACCTS PAY/ DALE BATES

Expédié à:
Ship to:

SAME

Date 12/02/14	Expédié par/Ship via: PICK UP	F.A.B./F.O.B.	Conditions/Terms
------------------	----------------------------------	---------------	------------------

No. de commande Purchase order no. PO25137 -LINE 4	Date de commande Order date 11/07/14	Vendeur(se)/Salesperson SARAH FAIRHURST	Notre No. de commande/Our order number
--	--	--	--

Qté req/ Qty req	Expédié Shipped	En souffe/ B.O.	No. d'article Item Number	Description	Prix unitaire Unit price	Prix rapporté Extended price
1	1	✓	599-A85741A (GL)	NOV.7- AMENDED PO TO ADD LINE#4 RE: FIRST SHIPMENT DAMAGED IN TRANSIT ORDERED BY CHANTAL LAVOIE COATING- CONDUCTIVE (3 PART GL KIT) COPPER BATCH #30844 EXP: MAY 10/2015 PART A - A85741A CATALYST (480GM) LOT#64669 PART B - A85741B BASE (0.85 GL) LOT#64670 PART C - A85741C RETARDANT(100GM) LOT#64671 MFG CERTIFICATION/MSDS INCLUDED + Tech Data		
1	1	✓	BATCH			

JE CERTIFIE PAR LES PRESENTES QUE LES PIECES D'AVION
DECRIES DANS LE PRESENT CERTIFICAT ONT ETE OBTENUES D'UNE
SOURCE D'APPROVISIONNEMENT CONFORME AUX CONDITIONS
AUXQUELLES LE CERTIFICAT D'AUTORISATION DE DISTRIBUTION
NO. 12-89 DU MINISTRE DES TRANSPORTS A ETE ATTRIBUE.

DATE

2 decembre 2014

SIGNATURE

Brenda Shea



I hereby certify that the aircraft parts, appliances and/or
materials described hereon were acquired from a source of
supply that is consistent with the conditions under which
the Department of Transport distributor approval
No. 12-89 has been granted.

Date:

December 2, 2014

Inspector's Signature

Brenda Shea

**RELEASE
CERTIFICATE**

AIR DYNAMICS

19420B Clark Graham Avenue
Baie d'Urfé, Québec, H9X 3R8
514-457-4287

AD-1(A)
QTY: 1

NOMENCLATURE COATING CONDUCTIVE (3 PART GL KIT) COPPER

PART NUMBER 599-AB5741A MODEL OFF TYPE

MAKE PPG INDUSTRIES / SHERWIN WILLIAMS

SERIAL NUMBER PART A-CAT. LOT# 64669
(PART B-BASE LOT# 64670) (PART C-RET. LOT# 64671)

NEW ☒ REPAIRED ☐ INSPECTED ☐ OVERHAULED ☐ MODIFIED ☐

PREVIOUS CERTIFICATION B#30844 (EXP: MAY 10, 2015)

I HEREBY CERTIFY THAT THE AIRCRAFT PARTS, APPLIANCES AND/OR MATERIALS DESCRIBED HEREON
WERE ACQUIRED FROM A SOURCE OF SUPPLY THAT IS CONSISTANT WITH THE CONDITIONS UNDER
WHICH THE DEPARTMENT OF TRANSPORT DISTRIBUTOR APPROVAL NO. 12-89 HAS BEEN GRANTED.

DATE DECEMBER 2, 2014 Brenda Shen
INSPECTOR'S SIGNATURE

JE CERTIFIE PAR LE PRESENT CERTIFICAT QUE LES PIECES D'AERONEFS
D'ORIGINE DANS LE PRESENT CERTIFICAT ONT ETE OBTENUES D'UNE
SOURCE D'APPROVISIONNEMENT CONFORME AUX CONDITIONS
AUXQUELLES LE CERTIFICAT D'AUTORISATION DE DISTRIBUTION
NO. 12-89 DU MINISTERE DES TRANSPORTS A ETE ATTRIBUE.

DATE

2 decembre 2014

SIGNE

Brenda Shea

AD
5

E30844

DEC. 2014

PPG Industries

Bringing innovation to the surface.SM

125 Colfax Street ☿ Springdale, PA 15144 ☿ Voice: (724) 274-7900 ☿ Fax: (724) 274-3085

CERTIFICATE OF CONFORMANCE

Purchase Order No:

Date of Mfg: 11/10/14

Control D: (Part A) 64669

Shelf Life: SIX (6) months

Date of Test: 11/10/14

Expiration Date: May 10, 2015

This is to Certify that **599-A8574-1 Part "A"** for Lightning Guard Copper Conductive Coating has been tested in the laboratory of Spraylat Corporation, 125 Colfax Street, Springdale PA 15144 USA

The test results are as follows:

Test	Requirements	Results
Percent Solids	75 +/- 1 by weight	<u>75.00</u> PERCENT
Viscosity at 25 degrees C (Brookfield LVT, Spindle No. 3 at 30 RPM)	200 +/- 30 cps	<u>200.00</u> CPS
Density	8.8 +/- 0.3 lbs./gallon	<u>8.80</u> LBS/GAL

PPG Industries, Inc.

Certified by Eva Siuda

30844

0.1 DEC. 2014

PPG Industries

Bringing innovation to the surface.™

125 Colfax Street ☿ Springdale, PA 15144 ☿ Voice: (724) 274-7900 ☿ Fax: (724) 274-3085

CERTIFICATE OF CONFORMANCE

Purchase Order No: A087160017661 **Date of Mfg:** 11/10/14
Control D: (Part A) **Shelf Life:** Six (6) months
(Part B) 64670
Date of Test: 11/10/14 **Expiration Date:** May 10, 2015

This is to Certify that **599-A8574-1 Lightning Guard Copper Cond. Coating** has been tested in the laboratory of Spraylat Corporation, 125 Colfax Street, Springdale PA 15144 USA

The test results are as follows:

Test	Requirements	Results
Viscosity (#2 EZ Zahn cup)**	26 +/- 2 seconds	<u>25.60</u>
Percent Solids (part "B" only)	81 +/- 3% by weight	<u>82.10</u> PERCENT
Dry Film Thickness	6 +/- 2mils	<u>7.50</u> MILS
Surface Resistivity*	<0.8 ohms point to point on 11.5" distance	<u>0.170</u> OHMS
Cohesion	ASTM D-3359	<u>PASS</u> (PASS/FAIL)
Pot Life	Minimum 3 hours	<u>4.00</u> HRS
Density (part B only)	20.7 +/- 1.0 lbs/Gallon	<u>21.26</u> LGS/GAL

**After a 1:0.5 volume reduction with Toluene mixing with 599-A85741 Part A and Part C.

*For resistivity reading use a Fluke Meter with sharp points.

Note: Temperature, humidity, agitation and volume mixed may affect pot life and cause different results than laboratory tests.

PPG Industries, Inc.

Certified by Eva Siuda

30844

0:1 DEC. 2014



PPG Industries

Bringing innovation to the surface.™

125 Colfax Street ☿ Springdale, PA 15144 ☿ Voice: (724) 274-7900 ☿ Fax: (724) 274-3085

CERTIFICATE OF CONFORMANCE

Purchase Order No: A087160017661

Date of Mfg: 11/10/14

Control D: Part C 64671

Shelf Life: Six (6) months

Date of Test: 11/10/14

Expiration Date: May 10, 2015

This is to Certify that **599-A8574-1 Part "C"** for Lightning Guard Copper Conductive Coating has been tested in the laboratory of Spraylat Corporation, 125 Colfax Street, Springdale PA 15144 USA

The test results are as follows:

Test	Requirements	Results
Density	8.1 Lbs./Gallon	<u>8.10</u> LBS/GAL
Color	Clear	<u>Clear</u>

PPG Industries, Inc.

Certified by Eva Siuda

CONCENTRATE LIGHTING GUARD COPPER CONDUCTIVE COATING

Features

Series 599-A8574-1 A sprayable, three component polyurethane system using copper as the conducting agent.

This system can be used on aircraft substrates, such as Kevlar, epoxy and fiberglass.

It is able to withstand lightning

strikes and passes Military

Specifications MIL-B-5087 and MILSTD-1757

Product Description

SYSTEM:	Three Component, air-dry
SOLIDS (A, B & C MIXED):	81 ± 3% by weight
DENSITY (A, B & C MIXED):	20.7 ± 1.0 lbs/gallon
VOC:	3.93 lbs/gallon (0.47 kg/liter)
THINNER:	Toluene
REC DILUTION RATIO:	1 part base (Part B) to 0.5 parts thinner by volume, then add Part A and Part C
REC MIXING RATIO:	7 parts base (Part B) to 1 part catalyst (Part A) and 0.35 parts retardant (Part C) by volume OR 100 parts base (Part B) to 6 parts catalyst (Part A) and 1 part retardant (Part C) by weight
APPLICATION METHOD:	Cup gun or pressure pot with agitation to keep copper in suspension.
DRYING TIME:	
FORCE DRY:	30 minutes flash off at room temperature; 30 minutes @ 120°F (49°C) then 30 minutes @ 160°F (71°C)
AIR DRY:	4 Hours air dry at room temperature

CONCENTRATE LIGHTING GUARD COPPER CONDUCTIVE COATING

MATERIAL DESCRIPTION

P

P

P

HUMIDITY RESISTANCE:

No significant change in resistance when tested in accordance with MIL-STD-202 Method 106- 40 cycles; MIL-STD-810 Method 507 Procedure 5 – 480 hours cycling.

SKYDROL RESISTANCE:

Passes 7 days immersion with no damage to film.

SURFACE RESISTIVITY:

≤0.8 ohms point to point on 11.5" (29.21 cm) distance. 0.03 ohms/sq @ 3 mils film thickness.

INSTRUCTIONS FOR APPLICATION

1. Put Part B
there is any

2. Transfer Part
between:

a.

b.

Dilution ratio (a) resu

Dilution ratio (b) resu

3. Add Part A

4. Spray paint

5. Flash off pai

6. Check dry fil

MINIMUM FILM THICKNESS:

6 mils ± 2 (150 microns ± 50) depending on application

POT LIFE:

≥ 3 Hours

COVERAGE:

650 SF/gal/mil (15.95 square meters/liter/25 microns) @ 100% efficiency

STORAGE LIFE:

Recommended Storage in unopened containers is 6 months from date of shipment. Older Material should have all Q.C. requirements rechecked before using.

NOTE:

Part A is moisture sensitive. Keep container tightly closed after use.

COATING SYSTEM:

Prime substrate with MIL-P-23377. Apply Lightning Guard 599-A8574-1 Topcoat with MIL-C- 46168. System meets MIL-STD-210.

NOTE: If paint viscosi

CONCENTRATE LIGHTING GUARD COPPER CONDUCTIVE COATING

APPLICATION INSTRUCTIONS:

MATERIAL DESCRIPTION:

Part A - Clear Catalyst - 1 part by volume in one pint can

Part B - Copper filled paint - 7 parts by volume in one gallon can

Part C - Clear Retardant - 0.25 parts by volume

INSTRUCTIONS FOR USE:

1. Put Part B on a paint shaker and shake for 20 minutes. Open the can and check the bottom for any residual settling. If there is any settling, finish mixing with a spatula by hand. Be sure there is no copper left at the bottom of the can.
2. Transfer Part B to a larger container and dilute with toluene to the desired viscosity. Recommended dilution ratio is between:
 - a. 1: 0.5 by volume (Part B:Toluene)
 - b. 1:1.0 by volume (Part B: Toluene)

Dilution ratio (a) results in higher solids, higher viscosity and faster film build-up and also shorter pot life

Dilution ratio (b) results in lower solids, lower viscosity and slower film build-up but longer pot life

3. Add Part A and Part C to diluted Part B and mix thoroughly again.
4. Spray paint at 5 +/- mils dry film thickness. Keep mixing constantly while spraying.
5. Flash off paint for 30 minutes at room temperature, then 30 minutes at 160° F OR air dry for four hours.
6. Check dry film thickness, conductivity and adhesion to the substrate.

NOTE: If paint viscosity increases beyond usable pot life, do not dilute with additional thinner. Paint is no longer usable.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Special provisions** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

7. Handling and storage

Storage

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurization. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
Hexamethylene diisocyanate, oligomers	TWA	Not established	Not established	Not established	Not established	0.5 mg/m ³
	STEL	Not established	Not established	Not established	Not established	1 mg/m ³
n-butyl acetate	TWA	150 ppm	150 ppm	150 ppm	150 ppm	Not established
	STEL	200 ppm	Not established	200 ppm	200 ppm	Not established
xylene	TWA	100 ppm	100 ppm	100 ppm	100 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	150 ppm	Not established
ethylbenzene	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	125 ppm	Not established
hexamethylene-di-isocyanate	TWA	0.005 ppm	5 mg/m ³ (as CN) S	0.01 ppm	5 mg/m ³ (as Cn)	Not established

Key to abbreviations

A = Acceptable Maximum Peak
 ACGIH = American Conference of Governmental Industrial Hygienists.
 C = Ceiling Limit
 F = Fume
 IPEL = Internal Permissible Exposure Limit
 OSHA = Occupational Safety and Health Administration.
 R = Respirable
 Z = OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

S = Potential skin absorption
 SR = Respiratory sensitization
 SS = Skin sensitization
 STEL = Short term Exposure limit values
 TD = Total dust
 TLV = Threshold Limit Value
 TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Respiratory : By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Restrictions on use : Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

9. Physical and chemical properties

Physical state : Liquid.

Flash point : Closed cup: 32.78°C (91°F)

Explosion limits : Lower: 1.1%

Color : Not available.

Odor : Not available.

pH : Not available.

Boiling/condensation point : >37.78°C (>100°F)

Melting/freezing point : Not available.

Specific gravity : 1.06

Density (lbs / gal) : 8.85

Vapor pressure : 1.2 kPa (8.9 mm Hg) [room temperature]

Vapor density : Not available.

Volatility : 30% (v/v), 25% (w/w)

Evaporation rate : 0.82 (butyl acetate = 1)

Partition coefficient: n-octanol/water : Not available.

% Solid. (w/w) : 75

10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure buildup could result in distortion, expansion and, in extreme cases, bursting of the container.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
- Hazardous decomposition products** : Cyanate and isocyanate.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene diisocyanate, oligomers	LD50 Oral	Rat - Female	>2500 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LC50 Inhalation	Rat	0.39 mg/l	4 hours
n-butyl acetate	Dusts and mists			
	LC50 Inhalation	Rat	18500 mg/m3	1 hours
	LD50 Oral	Rat	10.768 g/kg	-
xylene	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LC50 Inhalation	Rat	>21.1 mg/l	4 hours
	LD50 Oral	Rat	4.3 g/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LC50 Inhalation	Rat	5000 ppm	4 hours
	Vapor			
hexamethylene-di-isocyanate	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LC50 Inhalation	Rat	4000 ppm	4 hours
	Vapor			
	LD50 Oral	Rat	0.71 g/kg	-
	LD50 Dermal	Rabbit	0.57 g/kg	-
	LC50 Inhalation	Rat	151 mg/m ³	4 hours
	Vapor			

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain.
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
xylene	A4	3	-	-
ethylbenzene	A3	2B	-	-

11 . Toxicological information

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
 IARC: 1, 2A, 2B, 3, 4
 NTP: Proven, Possible
 OSHA: +
 Not listed or regulated as a carcinogen: -

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Hexamethylene diisocyanate, oligomers	Acute EC50 >100 mg/l	Daphnia - daphnia magna	48 hours
	Acute EC50 >1000 mg/l	Algae - scenedesmus subspicatus	72 hours
n-butyl acetate	Acute LC50 18000 to 19000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
xylene	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
ethylbenzene	Acute LC50 4200 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
	Acute LC50 5100 to 5700 ug/L Marine water	Fish - Atlantic silverside - Menidia menidia	96 hours
	Acute EC50 2930 to 4400 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 3300 ug/L Marine water	Fish - Atlantic silverside - Menidia menidia	96 hours
	Chronic NOEC 6800 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1866	UN1866	UN1866	UN1866
UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
Transport hazard class(es)	3	3	3	3
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	793.65	Not applicable.	Not applicable.	Not applicable.
RQ substances	(xylene, hexamethylene-di-isocyanate)	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
 TDG : None identified.
 Mexico : None identified.
 IMDG : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.
Australia inventory (AICS) : All components are listed or exempted.
Canada inventory (DSL) : All components are listed or exempted.
China inventory (IECSC) : All components are listed or exempted.
Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.
Japan inventory (ENCS) : All components are listed or exempted.
Korea inventory (KECI) : All components are listed or exempted.
New Zealand (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : All components are listed or exempted.

United States

SARA 302/304: No products were found.

CERCLA: Hazardous substances.: hexamethylene-di-isocyanate: 100 lbs. (45.4 kg); ethylbenzene: 1000 lbs. (454 kg); xylene: 100 lbs. (45.4 kg); n-butyl acetate: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

Chemical name	CAS #	Acute	Chronic	Fire	Reactive	Pressure
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Product code **A85741A**Date of issue **5 February 2014** Version **3.01**Product name **A8574-1 LT GUARD PT A**

15. Regulatory information

Hexamethylene diisocyanate, oligomers	28182-81-2	Y	N	N	N	N
n-butyl acetate	123-86-4	Y	N	Y	N	N
xylene	1330-20-7	Y	N	Y	N	N
ethylbenzene	100-41-4	Y	Y	Y	N	N
hexamethylene-di-isocyanate	822-06-0	Y	N	N	Y	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313	Chemical name	CAS number	Concentration
Supplier notification	xylene	1330-20-7	7 - 13
	ethylbenzene	100-41-4	1 - 5

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 Health : 3 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 3 Instability : 0

Date of previous issue : 1/12/2014.

Organization that prepared the MSDS : EHS

☒ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.



Date of issue 26 February 2014

Version 7.01

1. Product and company identification

Product name : 599-A85741 PT B LIGHTING GUARD-CONC
Code : A85741B
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone : (412) 434-4515 (U.S.)
number : (514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : (724) 274-7900 (SPRINGDALE, PA) 8:00 a.m. - 5:00 p.m. EST

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : Harmful if inhaled.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : May cause skin dryness and irritation.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
aggravated by over-exposure

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
copper	7440-50-8	40 - 70
2-methoxy-1-methylethyl acetate	108-65-6	5 - 10
toluene	108-88-3	5 - 10
Silica, amorphous, fumed, cryst.-free	112945-52-5	1 - 5
silver	7440-22-4	1 - 5
xylene	1330-20-7	0.1 - 1
2-methoxypropyl acetate	70657-70-4	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product	: Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
<u>Extinguishing media</u>	
Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
copper	TWA	1 mg/m ³ (as Cu) TD 0.2 mg/m ³ F	1 mg/m ³ TD 0.1 mg/m ³ F	1 mg/m ³ TD 0.2 mg/m ³ F	1 mg/m ³ (as Cu) 0.2 mg/m ³ (as Cu) 2 mg/m ³ (as Cu) 2 mg/m ³ (as Cu)	Not established
	STEL	Not established	Not established	Not established		Not established
2-methoxy-1-methylethyl acetate	TWA	Not established	Not established	50 ppm	Not established	50 ppm
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not established	500 ppm Z A 300 ppm Z C	Not established	Not established	Not established
Silica, amorphous, fumed, cryst.-free	TWA	Not established	Not established	Not established	10 mg/m ³ 3 mg/m ³ R	Not established
silver	TWA	0.1 mg/m ³ TD F	0.01 mg/m ³ (as Ag)	0.1 mg/m ³	0.1 mg/m ³	Not established
xylene	TWA	100 ppm	100 ppm	100 ppm	100 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	150 ppm	Not established

Key to abbreviations

A = Acceptable Maximum Peak
 ACGIH = American Conference of Governmental Industrial Hygienists.
 C = Ceiling Limit
 F = Fume
 IPEL = Internal Permissible Exposure Limit
 OSHA = Occupational Safety and Health Administration.
 R = Respirable
 Z = OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

S = Potential skin absorption
 SR = Respiratory sensitization
 SS = Skin sensitization
 STEL = Short term Exposure limit values
 TD = Total dust
 TLV = Threshold Limit Value
 TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

8 . Exposure controls/personal protection

- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 4.44°C (40°F)
- Explosion limits** : Lower: 1.1%
- Color** : Not available.
- Odor** : Not available.
- pH** : Not available.
- Boiling/condensation point** : >37.78°C (>100°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 2.56
- Density (lbs / gal)** : 21.36
- Vapor pressure** : 1.9 kPa (14.4 mm Hg) [room temperature]
- Vapor density** : Not available.
- Volatility** : 50% (v/v), 17.95% (w/w)
- Evaporation rate** : 1.24 (butyl acetate = 1)
- Partition coefficient: n-octanol/water** : Not available.
- % Solid. (w/w)** : 82.05

10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological informationAcute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-methoxy-1-methylethyl acetate	LD50 Oral	Rat	8532 mg/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
Silica, amorphous, fumed, cryst.-free	LC50 Inhalation	Rat	49 g/m3	4 hours
	LD50 Oral	Rat	3160 mg/kg	-
silver	LD50 Oral	Rat - Male	>5000 mg/kg	-
xylene	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit	>1.7 g/kg	-
2-methoxypropyl acetate	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	8532 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LC50 Inhalation	Rat	>5320 ppm	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs: Contains material which causes damage to the following organs: lungs, brain.
Contains material which may cause damage to the following organs: blood, kidneys, the reproductive system, liver, heart, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, nose/sinuses.CarcinogenicityClassification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
toluene	A4	3	-	-
Silica, amorphous, fumed, cryst.-free	-	3	-	-

Carcinogen Classification code:
 ACGIH: A1, A2, A3, A4, A5
 IARC: 1, 2A, 2B, 3, 4
 NTP: Proven, Possible
 OSHA: +
 Not listed or regulated as a carcinogen: -

Teratogenicity

Developmental effects : Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects : Contains material which may impair female fertility, based on animal data.

12 . Ecological information

Environmental effects : Water polluting material. May be harmful to the environment if released in large quantities.

Aquatic ecotoxicity

12 . Ecological information

Product/ingredient name	Result	Species	Exposure
toluene	Acute LC50 5800 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 28000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
silver	Acute LC50 2.13 to 2.93 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Acute EC50 0.24 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 1.1 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
xylene	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours

13 . Disposal considerations**Waste disposal**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	Yes.	Yes.	No.	No.

14. Transport information

Marine pollutant substances	(copper)	(copper)	Not applicable.	Not applicable.
Product RQ (lbs)	7989.9	Not applicable.	Not applicable.	Not applicable.
RQ substances	(copper, toluene)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : The marine pollutant mark is not required when transported by road or rail.
- Mexico** : None identified.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : All components are listed or exempted.
- Canada inventory (DSL)** : All components are listed or exempted.
- China inventory (IECSC)** : All components are listed or exempted.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : All components are listed or exempted.
- Korea inventory (KECI)** : All components are listed or exempted.
- New Zealand (NZIoC)** : Substance Use Restricted
- Philippines inventory (PICCS)** : All components are listed or exempted.

United States

SARA 302/304: No products were found.

CERCLA: Hazardous substances.: toluene: 1000 lbs. (454 kg); n-butyl acetate: 5000 lbs. (2270 kg); xylene: 100 lbs. (45.4 kg); silver: 1000 lbs. (454 kg); copper: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
copper	7440-50-8	Y	N	N	N	N
2-methoxy-1-methylethyl acetate	108-65-6	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
Silica, amorphous, fumed, cryst.-free	112945-52-5	N	N	N	N	N
silver	7440-22-4	Y	N	N	N	N
2-methoxypropyl acetate	70657-70-4	Y	Y	Y	N	N
Product as-supplied :		Y	Y	Y	N	N

<u>SARA 313</u>	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification	copper	7440-50-8	40 - 70
	toluene	108-88-3	5 - 10
	silver	7440-22-4	1 - 5

Product code **A85741B**

Date of issue **26 February 2014** Version **7.01**

Product name **599-A85741 PT B LIGHTING GUARD-CONC**

15 . Regulatory information

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 Health : 3 Reactivity : 0

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 3 Instability : 0

Date of previous issue : 1/13/2014.

Organization that prepared : EHS
the MSDS

☒ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.



Date of issue 11 March 2014

Version 2

1. Product and company identification

Product name : A8574-1 LT GUARD PT C
Code : A85741C
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : (724) 274-7900 (SPRINGDALE, PA) 8:00 a.m. - 5:00 p.m. EST

2. Hazards identification

Emergency overview : WARNING!
FLAMMABLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED.
HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE
AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE
HARMFUL IF INHALED. CONTAINS MATERIAL THAT CAN CAUSE TARGET
ORGAN DAMAGE.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : Harmful or fatal if swallowed.
Skin : Toxic in contact with skin. Irritating to skin. May cause an allergic skin reaction.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
pentane-2,4-dione	123-54-6	60 - 100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
<input checked="" type="checkbox"/> pentane-2,4-dione	TWA	25 ppm S	Not established	25 ppm S	Not established	20 ppm
	STEL	Not established	Not established	Not established	Not established	40 ppm

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: 33.89°C (93°F)
Explosion limits	: Lower: 1.7%
Color	: Not available.
Odor	: Not available.
pH	: Not available.
Boiling/condensation point	: >37.78°C (>100°F)
Melting/freezing point	: Not available.
Specific gravity	: 0.98
Density (lbs / gal)	: 8.18

9. Physical and chemical properties

Vapor pressure	: 0.39 kPa (2.9 mm Hg) [room temperature]
Vapor density	: Not available.
Volatility	: 100% (v/v), 100% (w/w)
Evaporation rate	: 0 (butyl acetate = 1)
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 0

10. Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pentane-2,4-dione	LD50 Oral	Rat	55 mg/kg	-
	LD50 Dermal	Rabbit	787.4 mg/kg	-
	LC50 Inhalation	Rat	1225 ppm	4 hours
	Vapor			

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Target organs : Contains material which causes damage to the following organs: mucous membranes, brain, upper respiratory tract, .
Contains material which may cause damage to the following organs: the nervous system, central nervous system (CNS).

12. Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
pentane-2,4-dione	Acute LC50 60100 to 71800 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
	Acute LC50 47600 to 52100 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	2310	2310	2310	2310
UN proper shipping name	PENTANE-2,4-DIONE	PENTANE-2,4-DIONE	PENTANE-2,4-DIONE	PENTANE-2,4-DIONE
Transport hazard class(es)	3 (6.1)	3(6.1)	3(6.1)	3(6.1)
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : None identified.
 TDG : None identified.
 Mexico : None identified.
 IMDG : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15 . Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.

Australia inventory (AICS) : All components are listed or exempted.

Canada inventory (DSL) : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.

Product code **A85741C**Date of issue **11 March 2014**Version **2**Product name **A8574-1 LT GUARD-PT-C**

15. Regulatory information

Japan inventory (ENCS) : All components are listed or exempted.**Korea inventory (KECI)** : All components are listed or exempted.**New Zealand (NZIoC)** : All components are listed or exempted.**Philippines inventory (PICCS)** : All components are listed or exempted.

United States

United States - TSCA 5(a)2 - Proposed significant new use rules:

pentane-2,4-dione Listed

SARA 302/304: No products were found.**CERCLA:** Hazardous substances.: acetic acid: 5000 lbs. (2270 kg);**SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:**

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
pentane-2,4-dione	123-54-6	Y	N	Y	N	N
Product as-supplied :		Y	N	Y	N	N

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1A: Material causing immediate and serious toxic effects (Very toxic). Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification**Flammability** : 3 **Health** : 3 **Reactivity** : 0

16. Other information

Hazardous Material Information System (U.S.A.)**Health** : 3 **Flammability** : 3 **Physical hazards** : 0**(*) - Chronic effects**

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)**Health** : 3 **Flammability** : 3 **Instability** : 0**Date of previous issue** : 5/12/2013.**Organization that prepared the MSDS** : EHS☒ **Indicates information that has changed from previously issued version.**

Disclaimer

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